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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/711,487

09/21/2004

Khamir Girish Joshi

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EXAMINER

SINGH, SUNIL

ART UNIT

PAPER NUMBER

3672

NOTIFICATION DATE

DELIVERY MODE

03/03/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/711,487	Applicant(s) JOSHI ET AL.	
	Examiner Sunil Singh	Art Unit 3672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 February 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 58-65 and 73-85 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 58-65 and 73-85 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The finality of the office action mailed 11/18/09 has been withdrawn.

The amended drawings filed 2/18/10 have not been entered since they are directed to new matter. The amended specification filed 2/18/10 has not been entered since it is directed to new matter.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 61 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The originally filed disclosure do not have basis for claim 61. This constitutes new matter.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 73-76,78-79 rejected under 35 U.S.C. 103(a) as being unpatentable over Richmond et al. '252 in view of Brown '325.

Richmond et al. discloses a pipeline comprising a first unbuoyed section (see drawing below, Fig. 2), second unbuoyed section (see drawing below, Fig. 2), at least one buoyancy section (24,26) disposed between the first and second sections. The positively buoyant inverse catenary section comprises two or more spatially arranged buoyancy solutions. Richmond et al. discloses the invention substantially as claimed. However Richmond et al. is silent about the topographic feature being selected from the group consisting of subsea basins, domes, valleys, cliffs, canyons, escarpments, and combinations thereof. Brown '325 teaches a pipeline traversing a topographic feature being selected from the group consisting of subsea basins, domes, valleys, cliffs, canyons, escarpments and combinations (see Figures). It would have been considered obvious to one of ordinary skill in the art to modify Richmond et al. to include the topographic feature as taught by Brown since such features are indigenous to the seabed environment.

With regards to claim 76, it would have been considered obvious to modify Richmond et al. by substituting the buoyancy modules with tethered buoys (38) as taught by Brown since it is an obvious design choice to substitute one known element for another to obtain predictable results.

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5. Claim 77 is rejected under 35 U.S.C. 103(a) as being unpatentable over Richmond et al. in view of Brown as applied to claim 73 above, and further in view of Moses et al. '977.

Richmond et al. (once modified) discloses the invention substantially as claimed. However, Richmond et al. (once modified) is silent about the buoy(26) being a buoyant coating. Moses et al. teaches buoy being a buoyant coating (42, Fig. 3). It would have been considered obvious to one of ordinary skill in the art to further modify Richmond et al. (as modified above) to make his buoys in the form of buoyant coating as taught by Moses et al. since such a modification is a design choice. Such modification prevents rupturing.

6. Claims 58,59,60,62,64,65,80-85 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richmond et al. in view of Brown '325 and Moses et al. '977.

Richmond et al. discloses an apparatus to traverse a seabed topographic feature, comprising: a subsea pipeline constructed to carry fluids across the topographic feature between a first location and a second location; wherein: said pipeline comprising at least one distributed buoyancy region (see drawing above); said pipeline comprising a first unbuoyed pipeline section (see drawing above) extending from said first location on a sea floor to said distributed buoyancy region and a second unbuoyed pipeline section (see drawing above) extending from said distributed buoyancy region to said second location on a sea floor; and said distributed buoyancy region comprising two or more spatially arranged discrete buoyancy solutions directly attached to said distributed buoyancy region to create a positively buoyant inverse catenary section connecting said

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first and said second pipeline sections in fluid communication when said distributed buoyancy solutions are located below the waterline. Richmond et al. discloses the invention substantially as claimed. However Richmond et al. is silent about the topographic feature being selected from the group consisting of subsea basins, domes, valleys, cliffs, canyons, escarpments, and combinations thereof. Further, Richmond et al. lack a flexure control device between the first/second unbuoyed pipeline section and the distributed buoyancy region. Brown '325 teaches a pipeline traversing a topographic feature being selected from the group consisting of subsea basins, domes, valleys, cliffs, canyons, escarpments and combinations (see Figures). Moses et al. teaches a flexure control device (32) between the first/second unbuoyed pipeline section and the distributed buoyancy region (see Fig. 2, 11).

It would have been considered obvious to one of ordinary skill in the art to modify Richmond et al. to include the topographic feature as taught by Brown since such features are indigenous to the seabed environment.

It would have been considered obvious to one of ordinary skill in the art to modify Richmond et al. to include flexure devices as taught by Moses et al. in order to reduce stress.

With regards to claims 60, 83, Richmond et al. is silent about the buoy(26) being a buoyant coating. Moses et al. teaches buoy being a buoyant coating (42, Fig. 3). It would have been considered obvious to one of ordinary skill in the art to modify Richmond et al. to make his buoys in the form of buoyant coating as taught by Moses et al. since such a modification is a design choice. Such modification prevents rupturing.

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With regards to claim 82, it would have been considered obvious to modify Richmond et al. by substituting the buoyancy modules with tethered buoys (38) as taught by Brown since it is an obvious design choice to substitute one known element for another to obtain predictable results.

7. Claim 61 is rejected under 35 U.S.C. 103(a) as being unpatentable over Richmond et al. in view of Brown and Moses et al. as applied to claim 58 above, and further in view of Wittgenstein (US 3173271)

Richmond et al. (as modified above) discloses the invention substantially as claimed. However, (the above modified) Richmond et al. is silent about including a tether system. Wittgenstein teaches a tether system (see col. 1 lines 1-35, see Figs. 1,2,4). It would have been considered obvious to one of ordinary skill in the art to further modify (the above modified) Richmond et al. to include a tether system as taught by Wittgenstein since such a modification would yield predictable results like retain the pipeline in a desired position.

Response to Arguments

8. Applicant's arguments with respect to claims 58,73,80 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sunil Singh whose telephone number is (571) 272-7051. The examiner can normally be reached on Monday through Friday 10:30 AM - 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on (571) 272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sunil Singh/
Primary Examiner, Art Unit 3672

Sunil Singh
Primary Examiner
Art Unit 3672

SS

2/24/10